<First Embodiment>

First, an information terminal device with display-illuminating means in the first preferred embodiment according to the invention is explained in FIGS. **1** to **3**.

FIGS. **1**A and **1**B are general perspective views showing the information terminal device with display-illuminating means in the first embodiment according to the invention. FIG. **1**A shows a state that the illuminating means is turned off and FIG. **1**B shows a state that the illuminating means is turned on.

FIG. **2** is a block diagram showing a controller of the information terminal device with display-illuminating means in this embodiment.

FIG. **3** is a flow chart showing the operation of the information terminal device with display-illuminating means in this embodiment.

As shown in FIG. **1**A, the information terminal device in this embodiment is a display **2** with a touch panel **2***a* on a main body **1**.

Also, a lid **4** for protecting the display is provided connecting through a hinge **4***a* to the top edge of the back side of the main body **1** while being allowed to fold up.

By folding up the lid **4** over the main body **1**, the display **2** can be protected covered therewith. The main body **1** becomes available by unfolding the lid **4**.

Also, at the side of the main body **1**, a power switch **5** for turning on/off the main power supply of device is provided.

Furthermore, on the top face of the main body **1**, as shown in FIG. **1**A, an open/close switch **6** to detect the opening/closing of the lid **4** and a photosensor **7** to detect the ambient brightness/darkness of the main body **1**.

The open/close switch **6** is pressed down and disconnected by the foldable lid **4**. When the lid **4** is open, the switch **6** connects, and when the lid **4** is closed folded up, the switch **6** disconnects. Then, the switch **6** outputs ON/OFF signal to CPU **11** of the controller **10** as detailed later.

On the other hand, the photosensor **7**, which is a sensor to detect the ambient brightness of the main body **1**, outputs ON/OFF signal to CPU **11** of the controller as detailed later according to the ambient brightness/darkness of the main body **1**.

Furthermore, the terminal device in this embodiment thus composed is, as shown in FIG. **1**A, provided with lights **20**, **20** as illuminating means at the top end of the lid **4**.

These lights **20**, **20** are disposed at two positions of the top end of the lid **4**, and the light-projecting directions are set to direct to the display **2** when the lid **4** is unfolded.

Thereby, the entire display **2** can be illuminated by the lighting of the lights **20**, **20** from above.

Meanwhile, as long as the lights **20**, **20** can illuminate the entire display **2** from above, the position and number of the lights disposed at the top end of the lid **4** are not limited particularly.

The turn-on/turn-off of the lights **20**, **20** is controlled by the controller **10** provided in the main body **1**.

The controller **10** provided in the main body **1** is explained, referring to FIG. **2**. As shown, the controller **10** of the terminal device in this embodiment is provided with CPU **11** connecting with the power switch **5**, and is connected with the open/close switch **6**, photosensor **7** and touch panel **2***a* through the input ports of CPU **11**.

Thereby, the open/close switch **6**, photosensor **7** and touch panel **2***a* through the input ports of CPU **11** can interrupt to the operation of CPU **11** through the input ports.

Also, CPU **11** is connected with a display controller **12** to control the display **2**, and the image process and power control of the display **2** can be performed by the display controller **12**.

Further, CPU **11** is connected with an illumination controller **13** to control the light **20**, and the turn-on/off of the light **20** can be controlled by the illumination controller **13**.

Also, CPU **11** is provided with timer means of a display timer **14** and an illumination timer **15**.

The display timer **14** monitors the touch panel **2***a*, when a certain time period passes away with the touch panel **2***a* being not operated, turning off the supply of power to the display **2** though the display controller **12** to save the power. When the touch panel **2***a* is operated, the timer is released and thereby the power is supplied to the display **2** again.

On the other hand, the illumination timer **15** monitors the touch panel **2***a*, when a certain time period passes away with the touch panel **2***a* being not operated, turning Off the supply of power to the light **20** though the illumination controller **13** to save the power. When the touch panel **2***a* is operated, the timer is reset and thereby the power is supplied to the light **20** again.

The operation of the information terminal device with display-illuminating means thus composed is explained below.

First, when the lid **4** is closed, since the open/close switch **6** is pressed down by the lid **4**, the main body **1** is electrically turned OFF. Also, in this state, since the power is not supplied to the photosensor **7** as well, the photosensor **7** falls into uncertain state and does not operate.

Then, turning ON the power switch **5**, though the open/close switch **6** is turned OFF while the lid **4** is closed, when the lid **4** is open, the open/close switch **6** turns ON.

Thereby, power is supplied to the photosensor **7**, when the ambience of device is light, and CPU **11** of the controller **10** recognizes that the ambience is light since the photosensor **7** detects the brightness.

On the other hand, when the ambience of device is dark, the photosensor **7** remains turned OFF and therefore CPU **11** recognizes that the ambience is dark.

Thereby, CPU **11** outputs a signal to the display controller **12** and the light **20** turns ON for a certain time period. Therefore, the user can confirm the content of display and operate the touch panel **2***a*.

When the touch panel **2***a* of the main body **1** is not operated during a certain time period, through the monitoring of the display timer **14**, the light **20** is turned OFF automatically by CPU **11**.

Also, when the lid **4** is closed, since the open/close switch **6** is pressed down by the lid **4**, the light **20** turns OFF even when the power switch **5** is turned ON.

Thus, in the terminal device of this embodiment, the light **20** does not turn ON unless the lid **4** is opened and it turns OFF when the lid **4** is closed. Therefore, since the turn-off operation of the light **20** is not necessary, the handling performance of the terminal device can be enhanced and the wasteful power consumption due to neglecting to turn off the light **20** can be prevented.

Also, with the photosensor **7** detecting the ambient brightness of device, the light **20** turns ON only when it is so dark that the illumination is necessary, and the light **20** turns OFF when the ambience is light. Therefore, the wasteful consumption of power can be avoided and an efficient illumination effect can be obtained. In addition, the turn-on/off operation is not necessary since the light **20** is turned on/off automatically according to the ambient brightness.

Furthermore, with the timer means, even the light **20** turned on is turned off when the terminal device is not operated during a given time period. Therefore, since the light **20** unavailable is not left as it turns on, the wasteful consumption of power can be avoided.